## **ABSTRACT**

Briefly, in accordance with one embodiment of the invention, a device may dynamically select a frequency on which to communicate on a wireless local area network by determining which channels are available and which are unoccupied, for example using a received signal power level measurement. A linear folding algorithm may be used to select an available channel at a midpoint in a larger gap between occupied channels. In the event there are multiple larger gaps of the same size, the larger gap at the higher frequency may be selected.